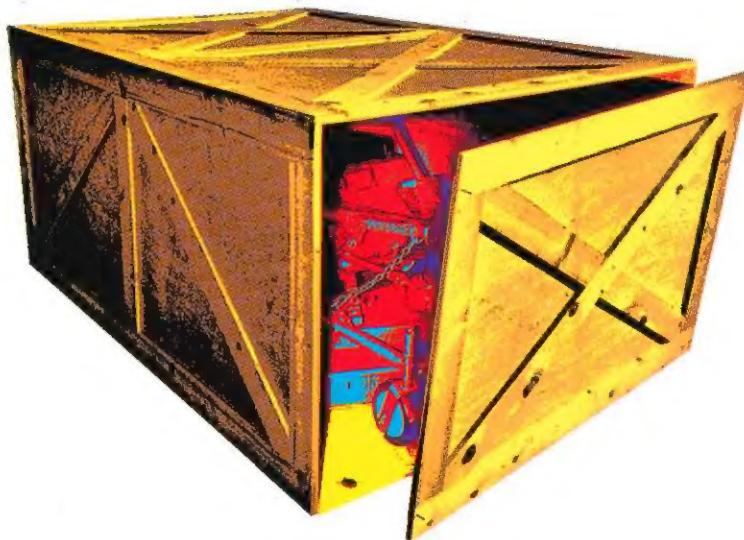


FARM CAT. BOX

REC. 10-19-73

U-3

**Toro rolls out  
the best engineered,  
best-built turf  
maintenance equipment  
in the world:**



**TORO 73!**

---



# How's this for openers?

It mows a swath 72 inches wide so we call it Groundsmaster 72.

It also drives a two-stage rotary snow plow (there's a cab, too) or a 60-inch rotary broom — to cut equipment investment cost, maintenance cost, and save storage space.

It's powered by an in-line 4-cylinder water-cooled industrial engine mounted in the rear.

It's driven through a hydrostatic system that's simple, silent and dependable. No belts, no chains in the power unit.

Its speed is infinitely variable from 0 to 10 mph — with instant forward-reverse.

Its steering is automotive type through the rear wheels — for maximum maneuverability (the actual cutting radius is zero).

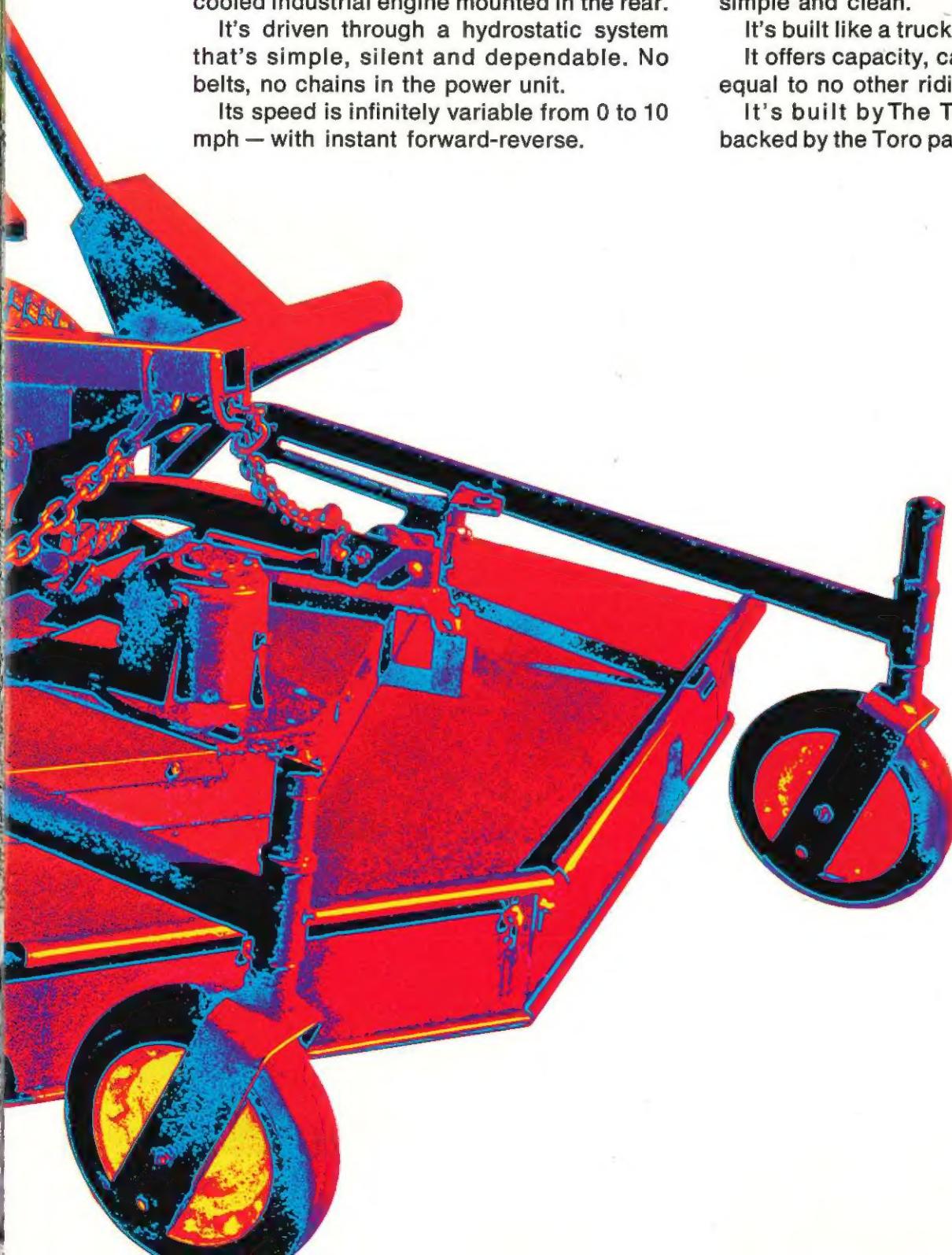
It's operated from a seat that puts the operator up front over the free-floating mower unit.

It's engineered for ease of maintenance — simple and clean.

It's built like a truck and handles like a toy.

It offers capacity, capability and durability equal to no other riding rotary.

It's built by The Toro Company — and backed by the Toro parts and service system.



**1** Nothing's in the way of the operator's view! He sits up front — free and clear of obstructions. As you can see, the total unit has been engineered for human comfort and ease of handling.

**2** Single foot pedal controls hydrostatic drive for forward-reverse — with infinitely variable speed control from 0 to 10 mph. No belts or chains or clutch or transmission to worry about in driving the power unit. Operator simply steps down on foot pedal to control forward speed, braking and reverse.

**3** Rugged automotive-type steering through the rear wheels gives remarkable maneuverability — the trimming side of the cutting unit actually turns on zero radius. There's nothing clumsy about Groundsmaster 72. It slips in and out of tight spots, slides under shrubbery, and trims close to fences, walls, buildings. It mows big and handles small!

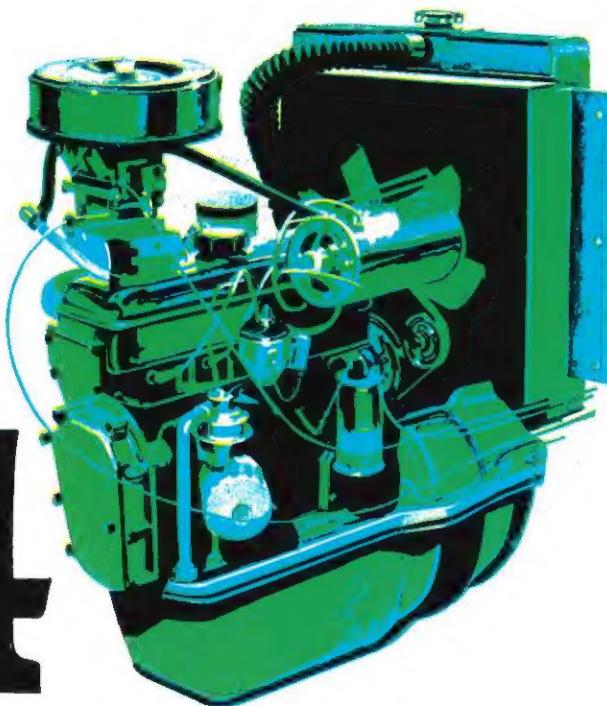
**4** There's power to spare in the 4-cylinder in-line water-cooled industrial engine. 19.8 hp! And it's smooth-running and quiet—with a big automotive muffler — so it should more than meet the noise pollution standards to be set for public area maintenance equipment in the future. Less operator fatigue, too. This beauty is easy on the eyes and ears!

**5** Mowing unit floats free of power unit on double ball joints. The Groundsmaster 72 rotary unit follows ground contours for a smooth, even cut.





2



5

## specifications

### GROUNDMASTER 72

#### PRIME MOVER:

**ENGINE:** CONTINENTAL 4 cylinder, water cooled, forced recirculating system. 19.8 shaft hp @ 3,450 RPM. 12 volt electrical system with generator. 47.8 cu. in. displacement. 8.5:1 compression ratio. Oil system full pressure—10 PSI gear driven oil pump. Replaceable oil filter. Forged steel connecting rods. Cylinder liners — wet type — cast iron — easily replaceable. Fuel system—down draft type carburetor. Governor—mechanical.

**BATTERY:** 12 volt, 54 plate, 50 Ampere hour capacity.

**STEERING:** Ross Gear Steering Gear Assembly, 15" steering wheel.

**FUEL CAPACITY:** 8 hour fuel supply.

**WEIGHT:** 1,600 lbs., dry weight with cutter deck.

**GROUND SPEED:** 0-10 m.p.h., infinitely variable.

**BRAKES:** Dynamic braking through propulsion system.

**GAUGES:** Hour Meter, Amp Meter, Water Temperature—safety light and buzzer, Oil Pressure—safety light and buzzer.

**CONTROLS:** Hand operated throttle and choke.

**TIRES:** (2) Rear Steering Tires—16 x 6.50 x 8 - 2 Ply, Rib. (2) Front Traction Drive Tires—23 x 8.50 x 12 - 2 Ply, Xtr. Demountable drop-center rims.

**PROPELLION:** Infinitely variable Vickers. T66ZH hydrostatic transmission. Mounted on GT 20 Dana Axle—20.9:1 ratio. Ground speed 0-10 m.p.h.—infinitely variable. Single foot pedal control of ground speed and forward-reverse.

**SEAT:** High back, replaceable molded foam back and seat cushions. 5" fore-aft slide adjustment.

**OVERALL DIMENSION WITH CUTTER DECK:** Height—50" to top of steering wheel. Width—75". Length—111". Wheel base—48". Tread width—Front & Wheels—37"; Rear & Wheels—36".

**ACCESSORY DRIVE:** Two banded "A" section over-center belts.

#### MOWER ATTACHMENT:

**HEIGHT OF CUT:** 1 1/2" adjustable front and rear. 1/4" increments.

**WIDTH OF CUT:** 72".

**CUTTER HOUSING:** 11 Gauge steel, 6 1/2" deep with a 2" step. Reinforced with 2" x 2" x 3/16" angle iron.

**CUTTER DRIVE:** PTO Driven Gear Box with 1.45:1 spiral bevel gears on center spindle. "B" section drive belts to end spindles.

**CUTTER SPINDLES:** 1" diameter shafts turning on two externally sealed greasable ball bearings.

**BLADES:** Three 25" long, heat-treated steel, suction-lift blades.

**LIFT:** Hydraulic.

**CUTTER WHEELS:** 4 Gauge wheels for maximum contour following ability. Torsion spring for counter balance. Rear caster—6" x 2 1/2". Front caster—10.25" x 3.25".

**OPTIONAL EQUIPMENT:** Auxiliary brakes. Mechanically-activated drum brakes on two front wheels—7 x 1 1/4". Hard-surface broom—60". 54" adjustable snow blower. All-weather cab, with removable window screens. Optional pressurized blower, air conditioning/heater, windshield wipers, rotating beacon, AM radio.

Road and night-operation kit—directional signals, sealed-beam headlights and taillights.



# And the Trojan 3: a year-round work horse.

In the spring, summer and fall it mows up to 18 acres in 8 hours with a 60-inch rotary unit. In the winter, it gets rid of snow with a 54-inch blade or 48-inch snow blower. And any time of the year, a 48-inch rotary broom sweeps leaves, debris and light snow from any hard-surfaced area. There's power to spare in the big 14 hp engine, too. Here's a worker!

# specifications

## **TROJAN 3 MODEL 30233**

## **TROJAN 10 MODEL 30210**

## **SULKY MODEL 30310**

## **60" WHIRLWIND MODEL 30160**

**ENGINE:** 14 hp engine, Stellite exhaust valve and seat, valve rotators, 3.6 gallon gas tank. (Trojan 10—1.5 gallons.) 12-volt electric starter. Battery not included.

**HEIGHT OF CUT:** 1" to 8" adjustable front and rear housing.

**WIDTH OF CUT:** 60".

**MOWING CAPACITY:** 15 acres a day at 3.5 m.p.h.

**GROUND SPEED:** At 3400 rpm cutting speed—first gear .657 m.p.h., second 1.96 m.p.h., third 3.5 m.p.h., and fourth 5.2 m.p.h.

**CUTTER HOUSING:** Heavy duty 10 gauge steel six inches deep, reinforced with 2" channel iron, 4 position discharge chute, abrasion resistant flexible rear guard.

**TRACTION DRIVE:** 4 speed gear transmission and differential enclosed in single gear case. Fast shift forward and reverse.

**STEERING BRAKES:** 6" x 1 1/4" drum type Bendix individual wheel brakes, standard equipment. (Optional on Trojan 10.)

**WHEELS AND TIRES:** Drive wheels, demountable drop center type rims, 8.50 x 12—2 ply lawn and garden tread tubeless tire. Caster wheels, free pivoting 10.25 x 3.25 semi-pneumatic, smooth tread, rotate on ball bearings, zerk type fitting. Sulky 4.80 x 4.00—2 ply tire with tube.

**CUTTER DRIVE:** Consists of 2 "B" section drive belts from engine to gear box; ratio: 1:1 using 5.2 P.D. pulleys. Tight slack belt clutch.

**GEAR BOX:** uses two heat treated 10 pitch spiral bevel gears. Gear box bearings Timken tapered rollers. Three cutter spindles driven by two "A" section belts. Spindle pulleys: 6.7 P.D. pulleys.

**CUTTER SPINDLES:** 1" diameter shafts turning on relubricatable two-row ball bearings.

**BLADES:** Three cutter blades 21" long, heat-treated steel.

## **DIMENSIONS:**

TROJAN 3 and 10: Width—63", Length—7' without sulky, 8'10 1/2" with sulky.

TROJAN 3: Height—38" top of gas tank.

TROJAN 10: Height—35" top of gas tank.

## **WEIGHT:**

TROJAN 3: 765 pounds w/o sulky.

TROJAN 10: 745 pounds w/o sulky.

Sulky: 62 pounds.

## **OPTIONAL EQUIPMENT:**

Sulky, Wheel Weights, Tire Chains, Hand Steering Brakes (Trojan 10), 48" Angle Broom, 54" Snow Blade, 48" Snowthrower.

**48" ANGLE BROOM:** Durable, polypropylene bristles. Adjustable height of sweep. Transport position.

**54" SNOW BLADE (MODEL 30500)** 10 gauge steel blade with 1/4" x 6" reversible and replaceable shear blade. Adjustable skids, Total weight 168 lbs.

**48" SNOWTHROWER (MODEL 30400)** Single stage with 270 degree chute control operated from handle. Adjustable skids.



trojan3

**TORO**



# The rugged smaller rotaries.

The Whirlwind walk-behind rotaries — no turf maintenance staff is really well-equipped without one. They get into hard-to-reach areas to trim everything from fine turf to heavy weeds. And they do it in a hurry.

Toro offers a choice of three sizes: the 21-inch Hevi-Duty Whirlwind in a hand-propelled or self-propelled model; the 25-inch Hevi-Duty Whirlwind in a self-propelled model; the powerful self-propelled 31-inch Whirlwind with forward and reverse drive.

All three are built to deliver all day service, day after day.

**21-INCH HEVI-DUTY WHIRLWIND**

**25-INCH HEVI-DUTY WHIRLWIND**

**31-INCH WHIRLWIND**

# specifications

## 21" HEVI-DUTY WHIRLWINDS

### HAND-PROPELLED MODEL 23000

### SELF-PROPELLED MODEL 23100

**ENGINE:** 5 hp, 4-cycle with oil pump, 27 oz. capacity, displacement 12.2 cubic inches; replaceable bronze main bearings; Stellite exhaust valve and seat. Crankshaft extension 1" diameter x  $\frac{3}{4}$ " long. Oil bath air cleaner, recoil starter and 5 quart gas tank.

**CUTTER BLADE:** 21" hardened high carbon steel, positive attachment with one fastener.

**WIDTH OF CUT:** 21".

**HEIGHT OF CUT:** 1" to  $4\frac{1}{2}$ " by moving wheels.

**HOUSING:** 12 gauge stamped steel. Spiral grass chamber, right hand discharge, hinged chute deflector.

**FRAME:** Integral with housing, 10 gauge steel.

**WHEELS:** Ball-bearing steel disc wheels with 8" dia. x 1.75" semi-pneumatic tires. Zerk fittings for lubrication.

**HANDLE:** Welded steel tube in two separable halves; plastic hand grip; three position handle height adjustment.

**THROTTLE CONTROL:** Control wire and casing; operating lever on upper handle.

**CLUTCH—SELF-PROPELLED MODEL:** Tight-slack V-belt, operated from upper handle.

**TRACTION DRIVE—SELF-PROPELLED MODEL:** V-belt from 2.8 P.D. sheave on engine crankshaft to 4.0 P.D. sheave on speed reducer input shaft. Engine to speed reducer—1.43:1 reduction.

**GEAR CASE—SELF-PROPELLED MODEL:** 14T Stressproof steel pinions supported by double-sealed ball bearings to 42T laminated steel spur gears riveted to wheels (3:1 reduction).

**DIMENSIONS:** width,  $24\frac{1}{4}$ "; length, 34"; height,  $15\frac{1}{4}$ " (less handle, wheels at 1" cutting height).

**WEIGHT:** HP Model 94 lbs., SP Model 110 lbs.

**OPTIONAL EQUIPMENT:** Bagging attachment (Model 3-5219).

## 25" HEVI-DUTY WHIRLWIND

### MODEL 23000

**ENGINE:** 5 hp, 4-cycle, 27 oz. capacity, displacement 12.2 cubic inches, replaceable bronze main bearings, Stellite exhaust valve and seat. Crankshaft extension 1" diameter x 3-5/32" long. Oil bath air cleaner, recoil starter, and 5 quart gas tank.

**CUTTER BLADE:** 25" hardened, high carbon steel, positive attachment with one fastener.

**WIDTH OF CUT:** 25".

**HEIGHT OF CUT:** 1" to 4" by moving wheels.

**HOUSING:** 14 gauge stamped steel. Spiral grass chamber, right hand discharge. Hinged chute deflector.

**FRAME:** One piece welded 1" x 12 gauge square steel tube.

**WHEELS:** Rear: ball-bearing steel disc wheels with 10.25" diameter x 3.50 semi-pneumatic tires. Front: ball-bearing steel disc wheels with 8" diameter x 1.75 semi-pneumatic tires.

**HANDLE:** Welded steel tube in two separable halves; plastic hand grip; three position handle height adjustment.

**THROTTLE CONTROL:** Control wire and casing; operating lever on upper handle.

**TRACTION DRIVE:** "V" belt from 2.50 driver sheave on engine crankshaft to 3.50 drive sheave on speed reducer input shaft. Engine to speed reducer—140:1 reduction.

**SPEED REDUCER:** Die cast aluminum housing, case-hardened four thread worm supported by a thrust roller bearing and two needle bearings. A cut bronze worm gear supported by two needle bearings; reduction 7.75:1.

**DIFFERENTIAL ACTION:** One way over-running roller clutch between each individual drive and speed reducer.

**FINAL DRIVE:** 14T hardened alloy steel pinions supported by sealed ball bearings to 42T case-hardened machined steel gears welded to wheels, reduction 3:1.

**DIMENSIONS:** width, 29"; height,  $19\frac{1}{2}$ " (less handle; wheel at 1" cutting height); length, 42".

**WEIGHT:** 149 lbs.

**OPTIONAL EQUIPMENT:** Bagging attachment (Model 3-5219).

## 31" WHIRLWIND

### MODEL 23000

**ENGINE:** 9.2 hp with six-quart gas tank. Stellite-faced exhaust valve and seat, valve rotators.

**HEIGHT OF CUT:** 9/16" to 3-9/16", adjustable by moving spacers on cutter bar shaft.

**WIDTH OF CUT:** 31".

**MOWING CAPACITY:**  $7\frac{1}{2}$  acres a day at 3.5 m.p.h.

**GROUND SPEED:** Selected speeds at 2, 3 or 4 miles an hour.

**CHASSIS:** 3/16" steel plate, welded into one unit. (Reinforced by angle iron.) Adjustable front guard, hinged rear guard.

**HANDLE:** 1 1/4" O.D. 13-gauge steel tubing.

**WHEELS AND TIRES:** Wheels are 14 gauge steel discs with 12 x 3.00 semi-pneumatic front tires, 14 x 4.00 semi-pneumatic rear tires.

**CUTTER BAR:** 3/8" thick with hardened and tempered blades riveted to ends.

**CLUTCHES:** Cutter-bar clutch is tight-slack flat belt. Traction clutch is disc type on speed reducer input shaft, jaw type on speed reducer output shaft.

**DIFFERENTIAL:** Enclosed bevel-gear type.

**DIMENSIONS:** width, 39"; height, 36"; length, 66" including handle; weight, 454 pounds.

**OPTIONAL EQUIPMENT:** sulky (Model 60003), leaf mulcher (Model 4-8989), cutter bar with non-suction type blades (Model 5-0885).





# Precision greensmowers.

The golf green is the ultimate test of a mowing machine's engineering, design and construction. And Toro's Greens-masters are more than equal to the test. Both the 21-inch walk-behind model and the 59-inch riding triplex have a unique Toro feature: fully floating cutting heads —isolated from the operator, the engine, and the traction and catcher sections of the mower. The result is a uniform cutting height from the first green to the last — a consistency in appearance and in playing characteristics throughout the course. An unusually wide variety of customizing attachments tailor either machine to the particular growing problems in every area.

GREENSMASTER  
GREENSMASTER 3

# specifications

## GREENSMASTER 3-RIDING GREENSMASTER MODEL 04411

**ENGINE:** 12 hp, 29.07 cu. in., dynamic balance, 4-cycle with dry paper element air cleaner, 4 pint lubrication system, electric starting with 12 volt lead-acid battery, and 5 gallon fuel capacity. Hour meter is standard equipment.

**CONFIGURATION:** Tricycle vehicle with front two wheels providing drive and rear wheel steering. Operator sits over driving (front) wheels and No. 1 cutting unit, with No. 2 and 3 cutting units in front of vehicle.

**TRACTION DRIVE:** Direct driven hydraulic pump through stack valve to orbital gear motors which directly drive wheels.

**CUTTING UNIT DRIVE:** Belt driven hydraulic triple pump through stack valve to gear motors which directly drive reels.

**SPEEDS:** (approx.) (3300 RPM Engine) 1st.—3.7 m.p.h. 2nd.—7.0 m.p.h. Rev.—3.7 m.p.h. Reels—1800 RPM.

**CLIP:** .27 approx.

**BRAKES:** Two 6" drum type mechanical with pawl and ratchet lock for parking.

**TIRES:** (3) 18 x 9.50 x 8, 2-ply Pneumatic tubeless demountable and interchangeable.

**TIRE PRESSURE:** 8 psi front—12 psi rear.

**OIL RESERVOIR:** 6 gal. capacity with diagonal baffle to separate suction side from return side.

**WHEEL BEARINGS:** Drive Wheels: needle bearings provided in wheel motors. Caster wheels: Timken tapered-roller.

**CUTTING UNITS:** Reel diameter: 5". Height of cut: 3/16" to 11/16".

**REEL CONSTRUCTION:** 8 blades riveted to 5 cast spiders. **POWER:** Hydraulic motor spined to reel shaft. **BEARINGS:** Timken tapered-roller. **BED-KNIFE ADJUSTMENT:** Opposed screw. **ROLLER ADJUSTMENT:** Front: micrometer hand adjustment with bolted clamp lock (1 turn = .025" H.O.C. change). Rear: pivot-arm quick change with spring actuated tapered-pin lock (.21" H.O.C. change). Slotted plate with locking screw for roller/reel parallelism.

**GENERAL SPECIFICATIONS: WIDTH OF CUT:** 59". **WHEEL TREAD:** 49 1/2". **WHEEL BASE:** 45 1/2". **TURNING RADIUS:** 15" uncut radius. **OVER-ALL LENGTH:** 87 1/2". **OVERALL WIDTH:** 69 1/4". **OVERALL HEIGHT:** 50 1/4".

**NET WEIGHT:** (with all fluids) 1080 lbs.

**OPTIONAL EQUIPMENT:** Full Roller Kit (Model 04412), Wiehle Roller Kit (Model 04413), Swaged Roller Kit (Model 04414), Rear Roller Cleaners (Model 04417), Power Thatching Reels (Model 04416), 1/8" Height of Cut Bedknives, Power Spiking Reels, Individual Reel Shut-Off (2 reels only), Variable Increment Quick Height of Cut.

## 3 & 4 HP WALK GREENSMASTER

### MODEL 04116, 3 HP ENGINE

### MODEL 04117, 4 HP ENGINE

**ENGINE:** 3 hp or 4 hp, four-cycle, with dry-type air cleaner, recoil starter and one gallon gas tank. Stellite-faced exhaust valve, and valve seats.

**ENGINE CLUTCH:** Multiple friction disc-operated from upper handle.

**REEL CLUTCH:** Engaging jaw type—hand operated at traction unit.

**TRACTION CLUTCH:** Engaging jaw type—hand operated at traction unit.

**REEL DRIVE:** "A" section V-belt on 2.0 P.D. and 3.70 P.D. to countershaft. (1.85:1) 3/8" pitch x 3/16" wide chain on 16T and 14T sprockets from countershaft. Reduction to reel—1.62:1.

**REEL:** 3 1/2" diameter 9 blade alloy steel on tapered bearings with adjustable locknut.

**BEDKNIFE AND BAR:** Single-edge spring steel knife, screwed to extruded aluminum one-piece bedbar and backing plate.

**TRACTION DRIVE:** "A" section V-belt on 2.0 P.D. and 3.70 P.D. to countershaft (1.85). From countershaft 18T and 48T gear (2.67:1) and 20T and 56T gear (2.8:1). All gears 16 pitch, 20-degree involute full depth, 1/2" wide. Gears running in oil.

**REDUCTION:** Engine to traction drum:—13.86:1.

**TRACTION DRUM:** 6" diameter tapered solid rubber on 16 gauge steel rims. Two sections running on ball bearings.

**DIFFERENTIAL:** Enclosed spur gears.

**GROUND SPEED:** 4.6 mph maximum.

**HEIGHT OF CUT:** 1/8" to 11/16".

**WIDTH OF CUT:** 21".

**CLIP:** .245".

**TRACTION UNIT:** Cast aluminum housing.

**HANDLE:** One piece 3/4" O.D. No. 16 gauge wall, welded steel tubing.

**REEL UNIT:** Cast aluminum and zinc side plates; aluminum extrusion backing plate. Reel unit independent of traction unit and catcher.

**SKIDS:** Cast aluminum with 10-11/16 square inches ground contact, pivoted on oil-impregnated bronze bushings.

**ROLLERS:** 2" O.D. steel tube with relubricatable ball bearings on 5/8" diameter shaft and equipped with dirt and moisture-excluding oil seals.

**DIMENSIONS:** Width: 27"; Length: 60" including handle and catcher. Height: 44 3/4" with handle.

**WEIGHT:** 147 pounds with catcher.

**OPTIONAL EQUIPMENT:** Del Monte Comb (Model 22939), Rigid Comb (Model 22849), Full Front Roller (Model 47309), Wiehle Roller (Model 47289), Brush (Model 22949), Sectional Roller (Model 47319), Skid Kit (Model 147299), Urethane Comb (Model 82560).





# Clean-cutting reels.

What's the best way to mow formal and semi-formal turf areas? With a reel mower. Shearing off blades of grass with a reel blade against a bedknife is a principle over 100 years old, and there's still no better way to get a crisp, clean, scissor-cut—with maximum safety, too. Toro offers three high-capacity reel mowers in its Professional series: a 70 inch, 76 inch, and the 81 inch Super Pro—which can handle up to 28 acres a day. All have three power-driven reels, and the hinged wing units follow ground contours for a smooth, even cut. These classics are precision mowing machinery at its very finest.

**SUPER PRO**  
**70-INCH PROFESSIONAL**  
**76-INCH PROFESSIONAL**

# specifications

## SUPERPRO

### 5 BLADE MODEL 03317

### 6 BLADE MODEL 03328

**ENGINE:** 12 h.p. 4 cycle engine. Gas tank capacity 3.6 gallons.

**HEIGHT OF CUT:** Seven positions,  $\frac{1}{2}$ " to  $2\frac{1}{2}$ ".

**WIDTH OF CUT:** 3 Unit, 6 feet 9 inches.

**MOWING CAPACITY:** 3 Unit, 28 acres per day.

**GROUND SPEED:** 2nd gear, 3.33 m.p.h. @ 2800 r.p.m.; 3rd gear, 5.4 m.p.h. @ 2800 r.p.m.; reverse gear, 3.64 m.p.h. @ 2800 r.p.m.; Transport 4th gear, 8.8 m.p.h. @ 2800 r.p.m.

**WHEELBASE:** Traction unit, 48".

**REELS:** 8" dia. x 30" long (5 blade or 6 blade option) double riveted on malleable steel spiders.  $1\frac{1}{2}$ " E.T.D. 150 steel shaft on self aligning, relubricatable ball bearings.

**BRAKES:** 4" dia. brake band operating off brake shaft in transaxle with a ratio of 9.25:1 with traction wheels. Parking brake included.

**TRACTION CLUTCH:** Tight slack belt.

**REEL DRIVE:**  $1\frac{1}{2}$ " square drive ball, held to shaft with .733 pitch dia. 48 tooth spine.

**WHEELS:** Traction: 8.50 x 12, 2-ply lawn and garden tread, tubeless tires 12 x 7, JA drop center demountable rim. Sulky: 18 x 9.50 x 8, 2-ply extra traction terra tubeless tire. Drop center rim.

**SULKY FORK:** 5/16" x 7" steel.

**SULKY SPINDLE:** 1 $\frac{1}{2}$ " diameter shaft, bronze bearings.

**WHEEL SHAFT:**  $\frac{3}{4}$ " dia. tapered roller bearings.

## 70" PROFESSIONAL AND 70" TEE MOWER

### 6 BLADE RECOIL START MODEL 03215

### 5 BLADE RECOIL START MODEL 03205

### 6 BLADE ELECTRIC START MODEL 03236

### 5 BLADE ELECTRIC START MODEL 03226

### 6 BLADE TEE MOWER MODEL 03297

**ENGINE:** 6.25 horsepower engine, 5 quart gas tank.

**HEIGHT OF CUT:**  $\frac{1}{2}$ " to  $2\frac{1}{2}$ ". Raise or lower skids to vary.

**WIDTH OF CUT:** 70".

**MOWING CAPACITY:** Mows 14 acres a day.

**GROUND SPEED:** Forward 3.0 m.p.h. @ 2800 r.p.m. Reverse 2.8 m.p.h. @ 2800 r.p.m.

**TRACTION DRIVE:**  $\frac{1}{2}$ " pitch x #41 roller chains on 10T and 30T sprockets (4:3:1 reduction) to differential.

**REEL DRIVE:**  $\frac{1}{2}$ " pitch x #40 roller chains on 12T and 20T sprockets (1.67:1 reduction) reel drive countershaft to reels.

**REELS:** 7" dia. with 5 or 6 blades double riveted to malleable steel spiders. 1" steel shaft on relubricatable ball bearings.

**REEL CLUTCH:** Tight-slack poly V-belt.

**TRACTION CLUTCH:** Tight-slack poly V-belt.

**DIFFERENTIAL:** Stamped steel case with roll form spur gears.

**REDUCTION:** Engine to reels 4.67:1. Engine to wheels, forward 40.3:1, reverse 43.05:1.

## 76" PROFESSIONAL

### 5 BLADE PNEUMATIC TIRES MODEL 06163

### 6 BLADE PNEUMATIC TIRES MODEL 06123

### 5 BLADE SEMI-PNEUMATIC TIRES MODEL 06183

### 6 BLADE SEMI-PNEUMATIC TIRES MODEL 06143

**ENGINE:** 9.2 h.p. engine with 2 gallon gas tank. Rope starter standard with 12 volt electric starting optional.

**REEL CLUTCH:** Rockford— $5\frac{1}{2}$ " Model LMG-156A.

**TRACTION CLUTCH:** Rockford—Model LMS-154A.

**REEL DRIVE:**  $\frac{1}{2}$ " pitch x  $\frac{1}{2}$ " wide roller chain on 15T and 15T sprockets from engine to countershaft.  $\frac{1}{2}$ " pitch x  $\frac{3}{8}$ " wide roller chain on 32T and 16T sprockets to front reel and on 13T sprockets and "B" section "V" belt on 3.6 P.D. and 4.4 P.D. pulleys to wing reels.

**REDUCTION, ENGINE TO REELS:** 3:1—including 6:1 in engine.

**REELS:** 7" diameter—6 blades double riveted to malleable iron spiders 1" diameter shaft on No. 204 size ball bearings. (Optional 5 blade.)

**BED KNIFE AND BAR:** Double edge high carbon steel knife screwed to fabricated steel bed bar. Opposed screw adjustment over cylindrical pivots. Stainless steel bed knife adjusting screws.

**TRACTION DRIVE:** 5/8" pitch x  $\frac{3}{8}$ " wide roller chain on 11T and 47T sprockets from countershaft (4.27:1 reduction).

**REDUCTION, ENGINE TO WHEELS:** 25.6:1 including 6:1 reduction in engine.

**STEERING:** 2.5:1 ratio, 15" steering wheel.

**WHEEL BASE:** 48" traction unit.

**DIMENSIONS:** 12 h.p. traction unit: overall length, 93"; overall width, 59 $\frac{1}{2}$ "; overall height, 40 $\frac{1}{2}$ " top of steering wheel. Dimensions when cutting units are installed on either traction unit: Three reel cutting unit: overall width, 84 $\frac{1}{2}$ " cutting position; 74" transport position.

**CLIP:** Clip 2nd Gear .83 5 Blade  
3rd Gear 1.34 5 Blade  
2nd Gear .89 6 Blade  
3rd Gear 1.12 6 Blade

**WEIGHT:** Traction unit, 725 pounds, 3 reel cutting unit, 295 pounds.

**CUTTER DRIVE:** Engine to First Jackshaft: 1.645:1 ratio, engine pulley 3.65 pitch diameter, jackshaft pulley 6.00 p.d. Matched set of 2, 3 V-belts 42.5" long. Tight slack belt clutch. First Jackshaft to Second Jackshaft: 1:1 ratio. 42 pitches of double strand #50 (5/8" pitch) chain and two 13 tooth sprockets, one of which is mounted on an eccentric housing for chain adjustment. Second jackshaft to reels: (same for front and rear mower drives). 2:1 ratio. #50 (5/8" pitch) chain 76 pitches long. Driver sprocket 11 teeth. Driven sprocket 22 teeth. All sprockets are hardened steel. Transport Position Reels: Reels raised by winch. 5:1 gear ratio 1500 pound capacity.

**OPTIONAL EQUIPMENT:** Electric winch (Model 54550), Dual fuel tank (Model 44329), Coated roller (Model 44699).

**WHEELS:** Drive wheels and sulky: #14 gauge steel discs. Steel hubs.

**TIRES:** 16x6.50-8 Tubeless Terra pneumatics on steel wheel discs.

**CLIP:** .944 (5 blade), .786 (6 blade).

**CONSTRUCTION:** Welded steel frame consisting of  $1\frac{1}{4}$ " square and round steel tubing. Engine base and other supporting members are formed sheet steel. Cutting units consist of welded flat and tubular steel. Sulky of  $1\frac{1}{4}$ " square steel tubing with cast iron caster pivot.

**DIMENSIONS:** Operating—Width: 74 $\frac{1}{2}$ "; Height: 33 $\frac{1}{2}$ "; Length: 64 $\frac{1}{2}$ "; Wheel Base: 37"; Wheel Tread: 41"; Storage—Width: 67"; Height: 33 $\frac{1}{2}$ "; Length: 38 $\frac{1}{2}$ ".

**70" TEE MOWER DIMENSIONS:** Operating—Width: 74 $\frac{1}{2}$ "; Height: 33 $\frac{1}{2}$ "; Length: 79 $\frac{1}{2}$ "; Wheel Base: 37"; Wheel Tread: 41"; Storage—Width: 68"; Height: 33 $\frac{1}{2}$ "; Length: 38 $\frac{1}{2}$ ".

**TURNING RADIUS:** 12" to inside of inside wheel.

**WEIGHT:** 430 pounds.

**OPTIONAL EQUIPMENT:** Coated Rear Roller (Model 45279), Steel Rear Roller (Model 48349), Anti-Scalp Roller (Model 47379), Grass Catcher Kit (Model 47469).

**DUAL WHEELS:** Steel disc, cast iron hubs with Orlite bushings.

**TIRES:** 3.50 x 6.

**DIFFERENTIAL:** Enclosed bevel gears.

**GROUND SPEED:** 4.5 m.p.h. max.

**HEIGHT OF CUT:**  $\frac{1}{2}$ " to  $2\frac{1}{2}$ "—raise or lower rollers to vary.

**WIDTH OF CUT:** Front reel 30 $\frac{1}{2}$ "; Wings 25 $\frac{1}{2}$ "; total 76".

**CLIP:** .86", 5 blade—.71", 6 blade.

**CHASSIS AND SIDEPLATES:** Welded steel frame of structural angles and flat bar stock.

**HANDLE:**  $\frac{3}{4}$ " pipe or 1-1/16" O.D. x No. 14 gauge wall tubing and 2" square tubing. Plastic grips.

**ROLLER:** 2 $\frac{1}{2}$ " O.D. steel tubing running on hardened bushings.

**REVERSE MECHANISM:** Planetary gears and reverse band operated by traction control lever. Can be used as brake.

**DIMENSIONS:** Width 36" (Wings up), 80" (Wings down)—Length 76"—Height 39".

**WEIGHT:** 784 pounds, 872 pounds w/ Electric start (including battery).

**STANDARD EQUIPMENT:** Power Steering (factory installed).

**OPTIONAL EQUIPMENT:** Rubber Roller (Model 88250), Electric Start Kit (Model 1-6969).





# Big tough gangs.

Spartan's the name, and they're really built. Available with 5, 7 or 9 blade reels — with pneumatic, semi-pneumatic or steel wheels — and you don't need a wrench to adjust the bedknife to the reel. A turn of a hand knob is all it takes — so adjustment time is reduced up to 75%, which means more time mowing. Spartans go to work on the Parkmaster tractor (see next pages) or in a number of different Toro frames to mow a 7 ft. to 22 ft. swath. The Toro Roughmaster gang is the rough-cutting version of the Spartan — with 4 or 5 blade reels, and a variety of frames that mow from 7 ft. to 26 ft. wide.

# specifications

## SPARTAN UNIVERSAL FRAME

MODEL:	WIDTH OF CUT:	OVERALL WIDTH CUTTING:	OVERALL WIDTH TRAILING:
33115—3 unit	7'	8'2"	8'2"
33125—3-5 unit conversion	11'6"	12'8"	8'2"
33135—5-7 unit conversion	16'	17'2"	9'1 $\frac{1}{2}$ "
33845—9 unit	21'6"	21'8"	Two configurations for trailing: 13'8" or 9'5".

## ROUGHMASTER FRAME UNITS: 3, 5, 7, 9 or 11

			HEIGHT OF CUT
33913—3 unit	7'2"	9'6"	With Rear Roller: 1 $\frac{1}{4}$ "—3 $\frac{1}{2}$ "
33923—3-5 unit conversion	11'10"	13'	With Gauge Wheels: $\frac{3}{4}$ "—4 $\frac{1}{4}$ "
33933—5-7 unit conversion	16'6"	18'9"	
9 unit	21'2"	22'3"	
11 unit	25'10"	27'0"	

## AERO FRAME—ROUGHMASTER UNITS: 3, 5, 7, 9 or 11

			HEIGHT OF CUT
33953—3 unit	7'2"	9'6"	With Rear Roller: 1 $\frac{1}{4}$ "—3 $\frac{1}{2}$ "
33963—3-5 unit conversion	11'10"	13'	With Gauge Wheels: $\frac{3}{4}$ "—4 $\frac{1}{4}$ "
33973—5-7 unit conversion	16'6"	18'9"	
9 unit	21'2"	22'3"	
11 unit	25'10"	27'0"	

## 3 POINT HITCH FRAME UNITS: 3

33503	6'10"	8'2"
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**FRAME:** Square tubular steel, welded construction.

**SPARTAN 5—MODEL 01065**

**SPARTAN 7—MODEL 01067**

**SPARTAN 9—MODEL 01069**

**CLIP:** SPARTAN 5 on 14" wheels—1.17"  
SPARTAN 7 on 16" wheels—1.34"  
SPARTAN 9 on 16" wheels—.74"

**CUTTING WIDTH:** 29 $\frac{1}{2}$ ".

**RATIO OF WHEEL SPEED TO REEL SPEED:** 1 to 7.5.

**NUMBER OF BLADES PER REEL:** 5, 7 or 9.

**REEL ASSEMBLY:** Special heat-treated blades of high quality steel double riveted to malleable cast iron spiders. Reel shaft is 1 $\frac{1}{8}$ " in diameter-adjustable tapered bearings. Spiders pinned to reel shaft with tapered roll pins.

**REEL DIAMETER:** 8 $\frac{1}{2}$ ".

**REEL DRIVE:** Both sides of the reel have a gear train made up of machine cut hardened steel gears and a clutch idler gear. All gears are sealed from dirt and run in lubricant.

**THROW-OUT CLUTCH:** Disengages reel for free wheeling and transport.

**WHEELS:** 14" steel wheels have replaceable rim and spokes. 16" steel wheels are integral one piece construction. 16" pneumatic and semi-pneumatic wheels have replaceable tires and hubs.

**HEIGHT OF CUT:** 5 blade on 14" wheels— $\frac{1}{2}$ " to 2-3/16", 7 and 9 blade on 16" wheels— $\frac{3}{4}$ " to 2 $\frac{1}{4}$ ".

**BEARINGS:** The reel, roller, and wheels have adjustable tapered roller bearings.

**REAR ROLLER:** The 3 $\frac{1}{2}$ " diameter steel roller has tapered roller bearings in a neoprene thrust mount which are sealed from grit and moisture. Roller brackets adjust the height of cut, offering 32 individual settings.

**BEDKNIFE AND BAR:** The double edged chrome vanadium steel bedknife is screwed to a high strength formed steel bar. The bedbar pivots on adjustable dynamic rod and bearings. The bedknife attaches to the bedbar with stainless steel screws.

**BEDKNIFE TO REEL ADJUSTMENT:** Bedknife adjusts against reel with positive adjustment control knob located at center of rear crosstube. Adjustment knob contains detent with .001" movement of bedknife for each indexed position.

**CHASSIS AND SIDE PLATE:** Recessed cast iron side plates have heavy tubular cross members. Lift arm provides the means for attaching the frame lift levers for raising the rear rollers when transporting.

**UNDERSLUNG DRAWBAR:** Special positioning of the drawbar exerts a hold-down pressure on the rear roller when mowing. The greater the forward speed, the greater the hold-down action on the rear roller.

**DIMENSIONS:** Width—40 $\frac{3}{8}$ " with steel wheels. 44" with pneumatic wheels. Height—16 $\frac{1}{2}$ ". Weight—205 lbs. (without drawbar and wheels).

**OPTIONAL EQUIPMENT:** 3 section rubber roller, 14-inch (Model 01343) and 16-inch (Model 01336) steel wheels; 16-inch pneumatic wheels (Model 01323) and 16-inch semi-pneumatic wheels (Model 01300) and 16-inch low-profile semi-pneumatic wheels (Model 01304).

**FRAME APPLICATIONS:** 5, 7 or 9 gang Parkmaster hydraulic tractor. 3, 5, 7 or 9 gang universal frame, 3 gang industrial frame, 3 gang, 3 point hitch frame.

**ROUGHMASTER 4 BLADE MODEL 01164**

**ROUGHMASTER 5 BLADE MODEL 01155**

**CLIP:** 2.1"—4 blade, 1.67"—5 blade

**CUTTING WIDTH:** 30".

**RATIO OF WHEEL SPEED TO REEL SPEED:** 1 to 7.5.

**REELS:** 10" diameter, using four or five  $\frac{1}{4}$ " x 1 $\frac{1}{2}$ " heat-treated blades riveted to five malleable cast iron spiders on 1 $\frac{1}{4}$ " shaft mounted on Timken tapered adjustable roller bearings with double-lip seals and stationary grass shields.

**REEL DRIVE:** Same as Spartan.

**THROW-OUT CLUTCH:** Same as Spartan.

**WHEELS:** 20" diameter Diamond tread four-ply tire and tube size 4.00 x 12—and a pressed steel rim.

**BEARINGS:** Same as Spartan.

**REAR ROLLER:** Same as Spartan. Roller brackets adjust the height of cut from 1 $\frac{1}{4}$ " to 3 $\frac{1}{2}$ ".

**REAR GAUGE WHEELS:** 8" diameter four-ply pneumatic tires mounted on steel rims with ball bearings. Height of cut range is 1 $\frac{3}{4}$ " to 4 $\frac{1}{2}$ ".

**BEDKNIFE AND BAR:** Single edged high carbon alloy steel, fastened to a triangular folded steel bed bar with heat-treated steel screws.

**SIDE PLATES:** Same as Spartan.

**CROSS MEMBERS:** Two solid steel shafts 1 $\frac{1}{8}$ " and  $\frac{1}{8}$ " join the side plates to form the mower chassis.

**REAR SUPPORT:** Optional—Roller or Gauge Wheels.

**WEIGHT:** 266 lbs.—4 blade, 270 lbs.—5 blade.

**DIMENSIONS:** Height—21". Width—46". Length—32".





# And turf tractors to match.

Toro tractors are designed to work on turf, and they're as tough as the Toro gangs they tow. They're engineered to give maximum pulling power with minimum turf damage. Superior weight distribution and low center of gravity are combined with a rugged 107 hp GM 6-cylinder industrial engine (or a 4-cylinder 78 hp Perkins Diesel) in both the Toro Turf Tractor and the Parkmaster<sup>®</sup>. The Turf Tractor is the all-purpose utility tractor for towing frames and hauling (with optional dump box). The Parkmaster comes equipped with a hydraulically-controlled frame in 5, 7 or 9-gang models that raise and lower gangs individually.

PARKMASTER<sup>®</sup>

TORO TURF TRACTOR

# specifications

## TORO TURF TRACTOR—GAS ENGINE—MODEL 37027

## PARKMASTER 5—GAS ENGINE—MODEL 33755

## PARKMASTER 7—GAS ENGINE—MODEL 33787

## PARKMASTER 7—DIESEL ENGINE—MODEL 33677

## PARKMASTER 9—GAS ENGINE—MODEL 33876

## PARKMASTER 9—DIESEL ENGINE—MODEL 33699

**ENGINE:** GASOLINE—Chevrolet, 6 cylinder—250 CID 8.5:1 compression ratio. Crankshaft and connecting rods—drop forged steel, heat treated. Battery 12 volt. Oil sys system—full pressure 20-30 lbs. per sq. inch driven by gear type pump. Oil capacity—5 qts. in crankcase plus 1 qt. in the oil filter. Oil filter—replaceable element. Air cleaner—dry element. A front pulley is mounted with extra belt grooves for power steering. Horsepower: 107 at 2400 RPM.

DIESEL—Perkins, 4 cylinder overhead valve, direct injection; 235.9 CID—16:1 compression ratio. Crankshaft and connecting rods—drop forged, heat treated. Battery—12 volt. Full pressure oil lubrication system, replaceable element oil filter. Dry type air cleaner with replaceable cartridge. Front pulley driven power steering pump. Horsepower: 78 BHP at 2500 RPM.

**POWER STEERING GEAR:** Saginaw recirculating ball screw, rack and pinion steering gear with integral  $3\frac{1}{2}$ " diameter piston and directional hold control valve. Heavy duty vane pump maintains high efficiency and high pressures and temperatures. Minimum output—1.75 GPM at 465 RPM—maximum 2.80 GPM at 1500 RPM.

**THROTTLE CONTROL:** Foot pedal—fast idle position with choke control linkage. Gas engine—provision for variable speed governor with hand operated throttle. Diesel engine—variable speed governor and hand throttle standard equipment.

**SEAT:** Contour seat with wrap around 13" high back rest. Finger tip fore and aft adjustment. Seat pad and backrest are foam filled with integral vinyl cover.

**COOLING SYSTEM:** Radiator with tube and fin construction. Stamped brass top and bottom tanks. 15 PSI pressure cap. 16 qt. capacity.

**FUEL CAPACITY:** 15 $\frac{1}{2}$  ga. ons tank rear mounted on tractor chassis with long filler neck.

**INSTRUMENT PANEL:** Consists of Ammeter, fuel oil gauge, oil pressure gauge, engine temperature gauge, speedometer, manual choke, combination starter switch. Additional provision for electric switch when optional road kit is installed. Diesel tractor also has manual fuel shut off for engine shut down.

**BATTERY:** Gasoline engine—12 volt, 54 plate, 45 amp capacity. Diesel engine—two 6-volt, heavy duty batteries wired to provide 12 volt service.

**TIRES:** Rear: dual all traction 7.50 x 16 with tubes with air water valve. (9 unit Parkmaster has special 8.00 x 16 lawn and garden tread turf tires.) Normal inflation 12 lbs. per sq. inch, minimum 10 lbs. per sq. inch for fine turf areas. Front: 6.70 x 15, 4 Ply or 9.50 x 14, 4 Ply, 12 PSI standard inflation.

**BRAKES:** Bendix 14 inch by  $2\frac{1}{2}$  inch wide, double servo hydraulic brakes on rear wheels, providing 119 sq. inches total brake shoe area. Wagner master cylinder. Parking brakes by mechanical actuation or rear brake shoes.

**DIMENSIONS:** Overall length—133". Height—51" at front of hood, 66" over steering wheel. Maximum width—84" (across rear tires) wheel base at 99". Front wheel tread—61 $\frac{1}{4}$ ". Rear wheel tread—65 $\frac{1}{2}$ ". Curb clearance—10". Weight: gasoline engine tractor—3000 lbs. total weight including all fluids. Front wheels—1460 lbs. Rear wheels—1540 lbs. Diesel engine—3300 lbs. total weight—including all fluids. Front wheels—1720 lbs. Rear wheels—1580 lbs.

**WEIGHT WITH HYDRAULIC MOWING FRAMES:** 5 Unit Parkmaster—gasoline engine: 3936 lbs. Diesel engine—4236 lbs. 7 Unit Parkmaster—gasoline engine 4358 lbs.—Diesel engine—4658 lbs. 9 Unit Parkmaster—gasoline engine 4800 lbs. Diesel engine—5100 lbs. Additional weight may be added using liquid ballast in tires.

**SPEEDS:** Transport speed in 4th gear: dependent on road and weather conditions. 30 MPH can be attained and should be considered maximum safe speed under ideal conditions.

### WORKING GEARS:

	1200 RPM	1600 RPM	2000 RPM
4th	14.69	19.58	24.48
3rd	8.83	11.78	14.73
2nd	4.40	5.87	7.33
1st	2.28	2.93	3.66
Reverse	1.77	2.37	2.96

**OPTIONAL EQUIPMENT:** Dump Box (Model 70043), Road Package (Model 70096); Front Fender Kit (Model 70196); Front Tires 9.50x14 (Model 70180); Front Tires 6.70x15 (Model 70177).

## TORO PARKMASTER HYDRAULIC FRAMES

### CUTTING UNITS: 5, 7 or 9.

**WIDTH OF CUT:** 5 unit—11"; 7 unit—14'6"; 9 unit—18'6".

**OVERALL WIDTH, CUTTING POSITION:** 7'10" to 20' depending on frame.

**OVERALL WIDTH, TRANSPORT POSITION:** 96", Spartan mowers with rubber tires. 92", Spartan mowers with steel wheels.

**OVERALL LENGTH, TRACTOR & FRAME:** 14'7" in cutting position.

**OVERALL HEIGHT, TRANSPORT POSITION:** To 7'7" depending on frame.

**HYDRAULIC LIFT FOR RAISING AND LOWERING ALL CUTTING UNITS:** 1st, 2nd and 3rd cutting units operate together. Cutting units 4 through 9 operate individually, depending on frame.

**MAIN FRAME:** Tubular and structural steel, bolted and electrically welded construction.

**WING LIFT ARMS:** Tubular steel, reinforced welded construction.

**HYDRAULIC SYSTEM:** Pump: Gear type, 10 G.P.M. @ 1700 R.P.M., 1500 P.S.I. belt driven from engine crankshaft with matched set of two belts. Reservoir: 7 Quart capacity with screw-on easy replaceable 40 micron filter. Full flow filter includes by-pass valve with 11-18 P.S.I. pressure setting. Vent cap and breather, including filter screen at oil fill port. Control Valves: Heavy duty, directional control valves, parallel circuit, stack design. Cast iron valve bodies, with hardened spouts and plated for corrosion protection. Primary relief valve, non-adjustable type set at 1500 P.S.I. maximum pressure. Relief valve prevents excess pressure build-up in the hydraulic system and safe-guards the hydraulic pump and hoses. Hydraulic Cylinders: Tie rod construction, 3 inch bore, seven double-acting cylinders; five 12 inch stroke and two 10 inch stroke. Chrome-plated rods  $1\frac{1}{2}$  inch diameter. Precision finished bore in cylinder tubes.

**HOSES:** Two braid hoses with swaged fittings.

**COUNTERWEIGHT BALLAST:** Combination front bumper and ballast bolted to front of tractor frame.

**TRACTOR TIRES:** Front: Drop center 15 x 5 wheels with 6.70x15, 4 Ply 1 $\frac{1}{2}$  ribbed tires and tubes or drop center 14 x 8 wheels with 9.50x14, 4 Ply, 1 $\frac{1}{2}$  ribbed tires and tubes. Recommended inflation 10 P.S.I. to 22 P.S.I., depending on application. Rear: Dual, demountable semi-drop center rims with 7.50x16, 4 Ply, R-3 tires and tubes or 8.00x16, 6 Ply lawn and garden tires and tubes. Valves in tubes have provisions for adding liquid ballast. Recommended inflation 18 P.S.I. for turf work, 24 P.S.I. for transport on concrete or black top surfaces.

**CUTTING UNITS:** Spartan or Roughmaster mowers. Note—Spartan mower only on 9 unit version.

**OPTIONAL EQUIPMENT:** Tractor options, see General Tractor Specifications.





# A timesaver in the traps.

One man can make 15 traps look this good in one hour — with a Toro Sandpro. It was designed, engineered and built to work in sand. And it not only works, it keeps working. One man can finish an entire course in 4 to 5 hours. It starts at the turn of a key and rolls on special tires (21 x 11.00-8) that carry only 4 psi. All three wheels are hydraulically driven, and the machine turns on zero radius to the left or right. The Sandpro pays for itself in less than a season — and you've got better looking and better playing traps in the bargain!

**SANDPRO**

# specifications

## SANDPRO MODEL 08875

**FRAME:** All welded tubular-steel construction.

**WHEELS:** Standard demountable—interchangeable for three positions. 21 x 11.00-8 tires. Extra low-pressure, 4 psi compass tread.

**ENGINE:** Kohler 8 hp Model 181 SP. Cast iron block, dry element air filter, fuel pump. Rubber mounted.

**STARTER:** 12 v. Bendix-drive electric starter is standard. Key switch controlled from dash.

**DRIVE:** 3-wheel hydraulic. Engine-mounted Vickers variable-displacement piston pump through flexible coupling to 3 Ross Torqmotors on wheels.

**STEERING:** Automotive-type steering wheel. 6:1 reduction ratio.

**SEAT:** One piece molded with back support. Adjustable forward and back.

**OPERATOR CONTROLS:** Key start, hand throttle, hand choke, ammeter and hour meter on dashboard. Foot pedal controls forward/reverse and speed. Hand-operated hydraulic control lifts and lowers rake. Valve disengages pump for towing or pushing.

**FUEL TANK:** 2.7 gallon.

**HYDRAULIC RESERVOIR:** 1½ gal.

**FILTER SYSTEM:** 10 micron replaceable element.

**SPEED RANGE:** Infinitely variable to 5½ m.p.h. maximum.

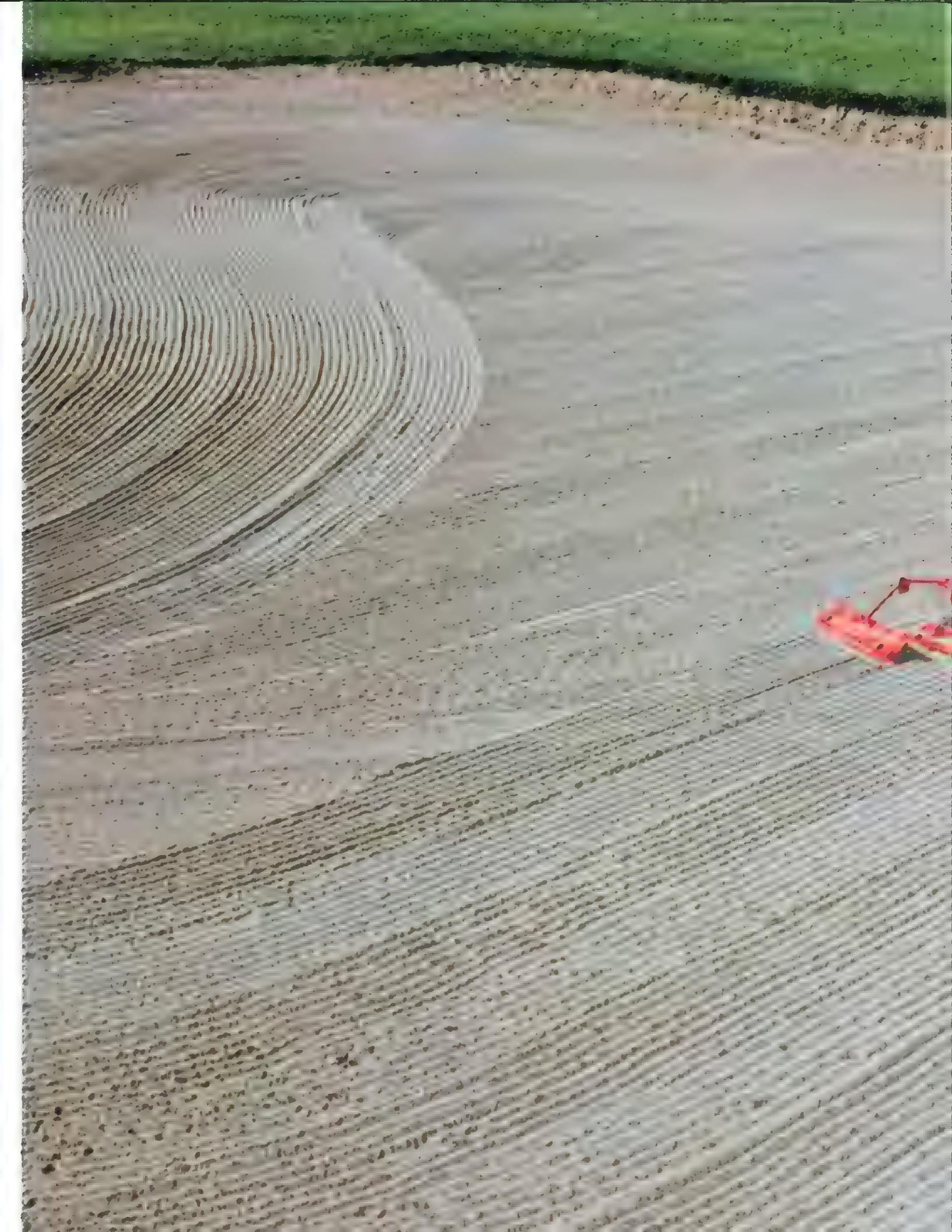
**TURNING RADIUS:** Machine turns on zero radius to the left or right.

**RAKE:** 68-inch width. Sub-surface blade breaks crust. Four independent forward conditioning sections, 9 finishing sections. Adjustable for depth of penetration.

**REFUSE CONTAINER:** Removable and located within easy reach of operator.

**DIMENSIONS:** Width—58½". Overall length—62½". Wheel base—40".

Height—42". Weight—approx. 650 lbs. with fluids.





# Three-in-one cleaner-upper.

It rakes and vacuums turf clean. It sweeps and vacuums hard surfaces. And it can renovate and condition turf, as well. Rake-O-Vac is the one machine that does the work of three. It picks up everything from pine needles to paper plates, cans and broken glass and carries debris on a powerful airstream into a 5½ cu. yd. hopper with remote dump. A patented nylon-fingered rotary rake does the job on turf; a polypropylene rotary broom lifts litter off hard surfaces. And with a special swing-blade thatching reel, Rake-O-Vac cuts through thatch, matted grass and tough runners — and vacuums away the debris. Transports at road speeds up to 60 mph, too. Why buy three machines when this one does it all?

**RAKE-O-VAC**

# specifications

## RAKE-O-VAC W/ENGINE, MODEL 07071

## RAKE-O-VAC W/PTO, MODEL 07172

**FRAME:** All welded structural square tubing.

**WHEELS:** Pressed steel, wide-based rims, automotive-type bearings. Unit can be transported at speeds up to 60 mph.

**TIRES:** Industrial, 11.0 x 15, 6-Ply hi-flotation. Easy on soft turf with only 6 lbs. psi empty, 14.5 lbs. psi with 2000 lb. load.

**ENGINE:** 2-cyl. Kohler model K482CS. 18 hp at 3200 rpm. 12 v. starter. Crankcase capacity: 6 pints. Fuel capacity: 5 gals. Automotive type muffler. PTO: Machine powered by Power Take Off Drive from prime mover—540 rpm; front universal shaft expandable type L14R series; rear universal shaft expandable type (for hitch adjustment) 35R series; 1.35:1 ratio rt.—angle gear box #400 series; Heavy Duty #50 series chain-type shaft coupling from gear box to side shaft; side shaft—730 rpm.

**DRIVES:** Combination V-belt and heavy-duty roller chain, fully shielded.

**HOPPER:** Fully enclosed. Capacity approx. 5½ cu. yds. Top section of perforated steel, 18 ga., sides, 18 ga. steel, bottom of replaceable galvanized steel. Full-width, quick-opening rear door. Remote dump capability.

**FAN:** 24" double inlet centrifugal. Four blades of 3/16" high-tensile steel. Rotates on 1½" fatigue-proof steel shaft with self-aligning, sealed ball bearings.

**DIMENSIONS:** Width—7'6"; Height—7'2"; Length—13'10".

**HITCH:** Engine model—2" ball, heavy-duty 1½ ton. PTO model—Pin type ¾" diameter; three vertical positions for tractor hitches ranging from 7¼" to 17¼" in height.

**WEIGHT:** Engine model—2,060 lbs. PTO model—1,920 lbs.

**FLEX-TIP REEL:** Working width—5'6". All steel with replaceable 3/16" extruded nylon teeth; semi-floating with counter balance spring; 6 rows of teeth, 12 sets of individually flexible banks per row; 564 teeth total. Reel shaft—1½" dia. Self-aligning sealed ball bearings. Overall dia.—18½".

## OPTIONAL EQUIPMENT:

**THATCHING REEL (Model 07078):** Working width—58¼". Number of blades: 30—with tip ends heat-treated. Blades swing on half-inch diameter axles. Core—3½" tubing with 1½" stubbed shafts. Self-aligning sealed ball bearings. Overall dia.—16¾" with blades extended.

**HARD SURFACE BROOM (Model 07076):** Working width—62". Bristles of .060 polypropylene. Shaft dia.—1½". Self-aligning sealed ball bearings. Outside dia. of reel—19".





# Laying the groundwork:

The Landscapers are multi-purpose tractor-drawn implements that work bare ground from rough grade to finished, seeded and fertilized turf areas. They handle everything from scarifying, grading and leveling, to forming fine-grade seedbeds, seeding and fertilizing. They also make easy work of maintenance tasks like overseeding, fertilizing, slicing and aerating. Two sizes are available — the larger Professional model is on the left in the picture.

The Hydro-Mulchers are trailer or truck-mounted machines that shoot a mixture of seed, water, fertilizer and wood-fiber mulch up to 200 feet over various kinds of terrain. Hydro-mulching is the fastest, most efficient method of vegetation establishment. Toro offers four models with from 500 to 3000 gallon working capacities. All units are hydraulically driven for dependable performance and ease of maintenance. The 1500 gallon model is on the right in the picture.

# specifications

## LANDSCAPER 4—MODEL 08504

The LANDSCAPER 4 is designed for 12 to 18 hp tractors with a hydraulic 3 pt. hitch. It is 44" wide; has a capacity for 40 lbs. of seed or 100 lbs. of fertilizer. The scarifier has nine teeth on 4 1/4" spacing and attaches and detaches quickly. The turf slicer has 11 blades of 8" diameter on 4 1/4" spacing. Fertilizer hopper is precision made by the Gandy Company.

## LANDSCAPER 6 PROFESSIONAL

### MODEL 08510

The LANDSCAPER 6 PROFESSIONAL is the deluxe model from the stand-point of size, features, and accessories. It is designed for the contractor and maintenance applications that have large seeding or overseeding requirements. The width is 72 inches and the unit mounts on a standard 3 pt. hitch equipped tractor. The LANDSCAPER 6 PROFESSIONAL has separate seed and fertilizer compartments. The seed compartment has a 100 lb. capacity and the fertilizer compartment a 250 lb. capacity. The unit can be equipped with seed tubes to carry the seed to the side of the coulter blade and the revolving disc-shaped coulter carries it into the soil. These tubes are on 3-inch spacing.

The Scarifier attachment, which folds up out of the way when not in use, has nine teeth on 9-inch spacing. The slicing attachment features 10-inch coulters on 2 or 3 inch spacings. There are three styles of coulter blades available: Straight, straight-serrated, disked. The slicing blades are used for aerating, mulching, and renovating existing turf and in overseeding operations.

## HYDRO-MULCHERS

### EVCO-U5—500 GALLON MODEL

#### MODEL 08005

**ENGINE:** Wisconsin VH 4D, air-cooled 30 hp, 12 volt electric start complete with starter, generator, and P.T.O.

**FUEL CAPACITY:** 6 gallon—mounted on side of engine.

**WEIGHT:** Empty—3,750; Loaded—8,370 (approximate).

**DIMENSIONS:** Length—13'6". Width—6'. Height—to work platform 4'6", to top of guard rail 7'.

**TANK:** 500 gallon working capacity, 570 gallon total. 3/16" steel plate construction. Internal abrasive coating with Catalyzed epoxy resin.

**UNDERCARRIAGE:** Tandem axle, 5000 lbs. capacity each axle with 7.00 x 15—6 ply tires. Tube type. Adjustable front dolly.

**PUMP:** Centrifugal 3" suction and 2" discharge capable of passing 3/4" solids.

#### STANDARD ON ALL MODELS:

**SPRAY NOZZLES:** Short-narrow, short-wide, medium and long range.

**PAINT:** White—corrosive resistant. (Other colors available at additional charge.)

**BATTERY:** 12 volt heavy duty 54 plate 60 Amp.

**OPTIONAL EQUIPMENT:** 1 1/2" light weight extension hoses—50' lengths. Quick release fittings for nozzles.

**DISCHARGE ASSEMBLY:** Direct flow from slurry pump with full opening to nozzle. Sprays in any direction—full 360 degree horizontal rotation and 150 degree vertical movement.

### EVCO-U10—1000 GALLON MODEL

#### MODEL 08010

**ENGINE:** Ford—4 cylinder—172 cu. in. displacement. Gasoline. Water cooled. Battery 12 volt. Horsepower: 68 at 2800 RPM.

**FUEL CAPACITY:** 26 gallons—regular gasoline.

**WEIGHT:** Empty—5,000 pounds. Loaded—14,000 pounds (approximate).

**DIMENSIONS:** Length—10'6". Width—7'10". Height to work platform 4'2". Height to top guard rails 6'8".

**TANK:** 1000 gallons working capacity, 1200 gallon total. Internal abrasive coating with Catalyzed epoxy resin.

**PUMP:** Centrifugal 4" suction and 3" discharge capable of passing 1" solids.

**WORK PLATFORM:** Non-skid 7' x 10'10" work area with side rail and gradual incline access ladder.

### EVCO-U15—1500 GALLON MODEL

#### MODEL 08015

**ENGINE:** Same as 1000 gallon model.

**FUEL CAPACITY:** Same as 1000 gallon model.

**WEIGHT:** Empty—7,200 pounds. Loaded—20,000 pounds (approximate).

**DIMENSIONS:** Length—14'6". Width—7'10". Height to work platform 4'2". Height to top guard rails 6'8".

**TANK:** 1500 gallons working capacity, 1700 gallon total. Internal abrasive coating with Catalyzed epoxy resin.

**PUMP:** Same as 1000 gallon model.

**WORK PLATFORM:** Non-skid 7'9" x 15' work area with side rail and gradual incline access steps.

### EVCO-U30 GALLON MODEL

#### MODEL 08030

**ENGINE:** Same as 1000 gallon model.

**FUEL CAPACITY:** Same as 1000 gallon model.

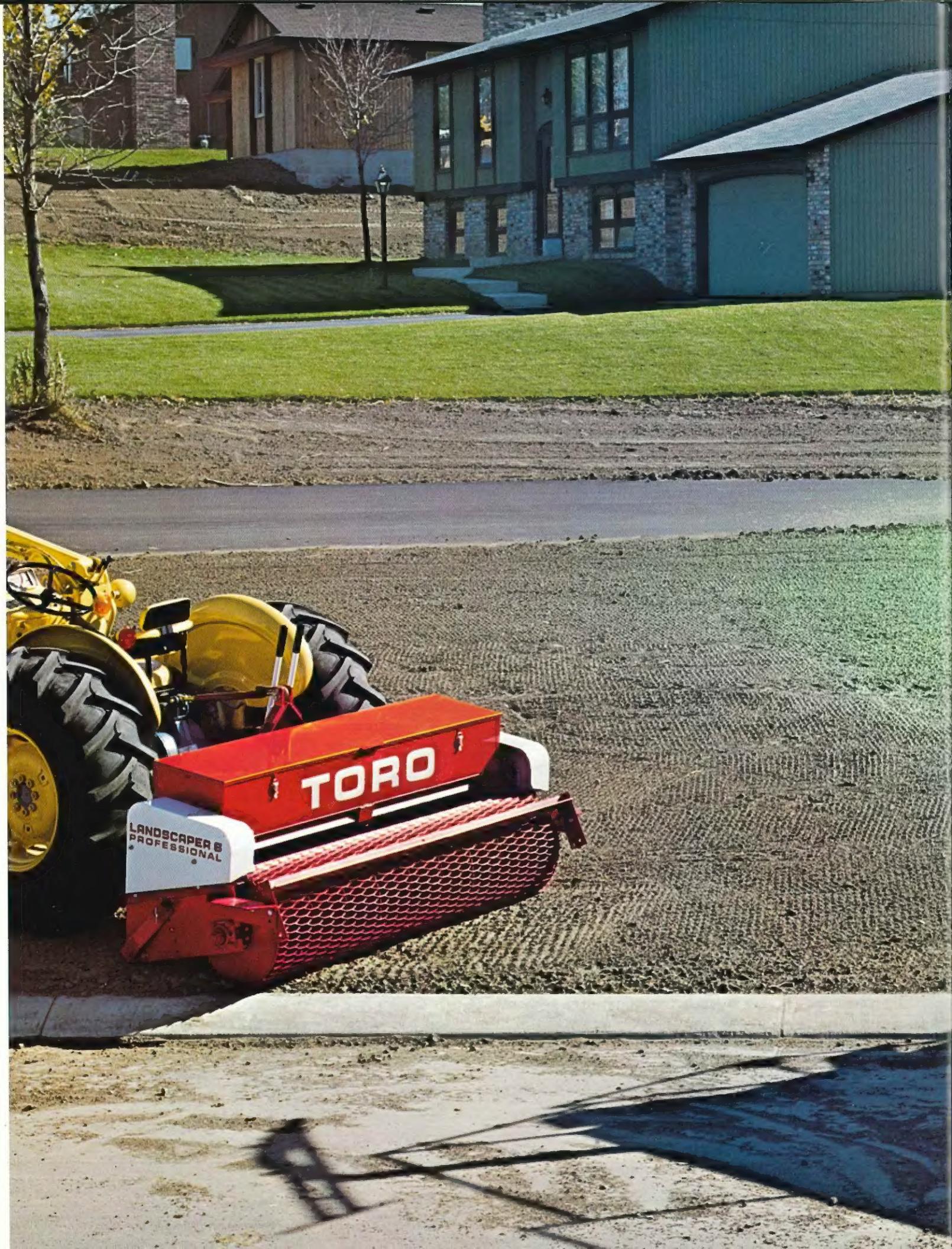
**WEIGHT:** Empty—8,000 pounds. Loaded—32,000 pounds (approximate).

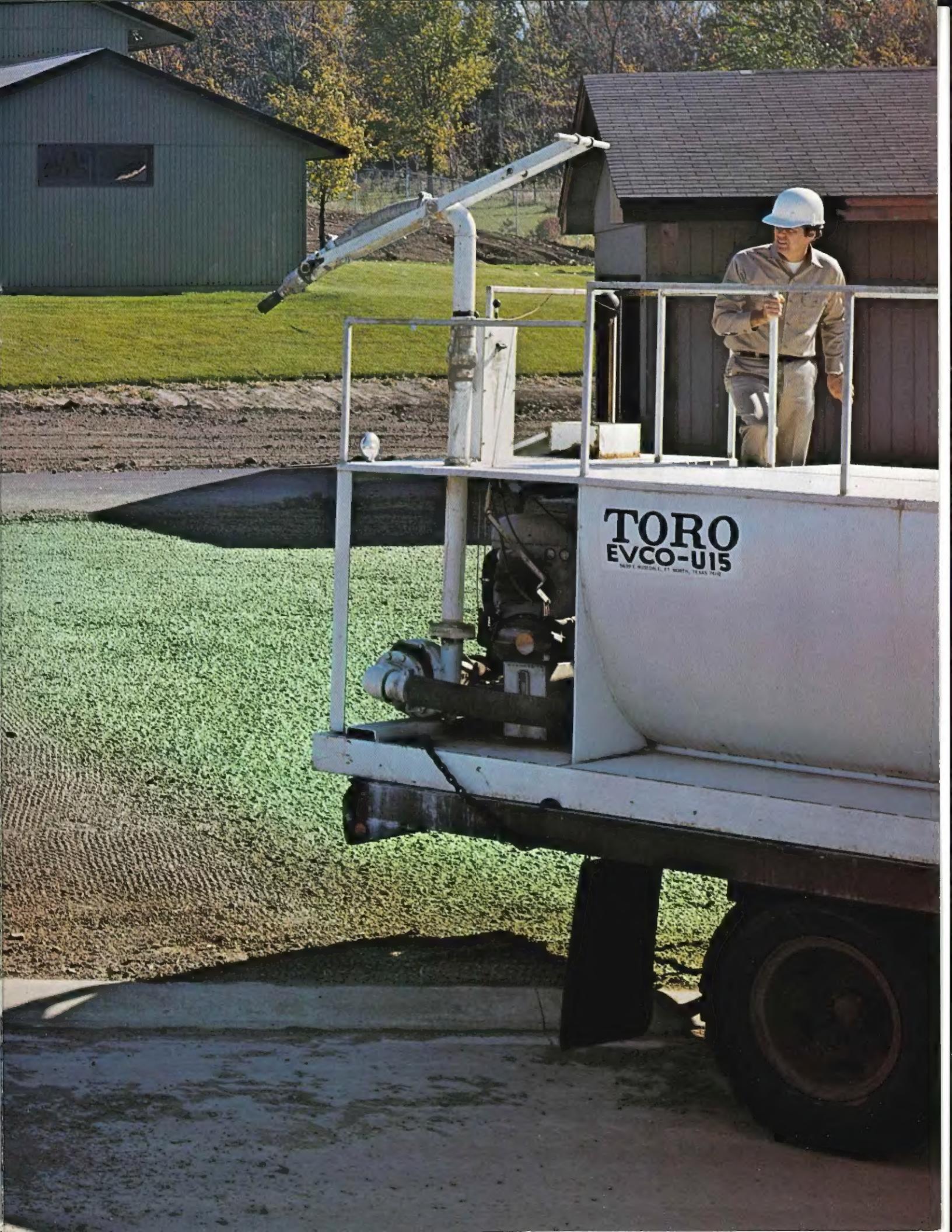
**DIMENSIONS:** Length—16'. Width—8'. Height to work platform 5'4". Height to top guard rails 7'10".

**TANK:** 3000 gallons working capacity, 3400 gallon total. Internal abrasive coating with Catalyzed epoxy resin. 3/16" tank with 3/8" ends.

**PUMP:** Same as 1000 gallon model.

**WORK PLATFORM:** Non-skid 7'9" x 16' work area with side rail and gradual incline access ladder.





**TORO**  
**EVCO-U15**  
1600 E. MOSSALL, FT. WORTH, TEXAS 76102

# TORO®

THE FOLLOWING ARE EXCLUSIVE TRADEMARKS OF THE TORO COMPANY: TORO, TROJAN, WHIRLWIND, GREENSMASTER, PROFESSIONAL, SUPER PRO, SPARTAN, ROUGHMASTER, PARKMASTER, SANDPRO, RAKE-O-VAC AND EVCO. PRINTED IN U.S.A. 490-3652